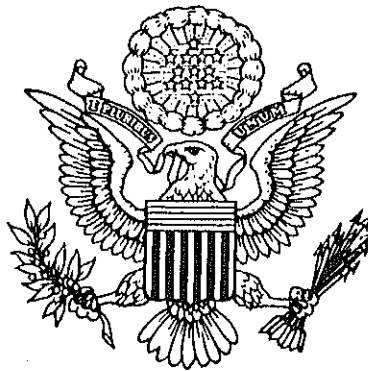




# **STOCKPILE REPORT**

## **to the Congress**



**JULY - DECEMBER 1962**

**EXECUTIVE OFFICE OF THE PRESIDENT  
OFFICE OF EMERGENCY PLANNING  
WASHINGTON 25, D. C.**



EXECUTIVE OFFICE OF THE PRESIDENT  
OFFICE OF EMERGENCY PLANNING  
WASHINGTON 25, D.C.

OFFICE OF THE DIRECTOR

April 26, 1963

The Honorable Lyndon B. Johnson  
The President of the Senate

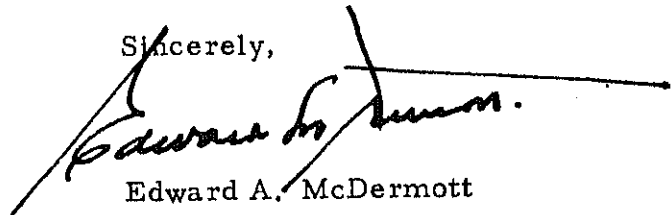
The Honorable John W. McCormack  
The Speaker of the House of Representatives

Sirs:

Pursuant to Section 4 of the Strategic and Critical Materials Stock Piling Act, Public Law 520, 79th Congress, there is presented herewith the semiannual report to the Congress on the strategic and critical materials stockpiling program for the period July 1 - December 31, 1962.

A statistical supplement to this report was transmitted to you on March 6, 1963.

Sincerely,

A handwritten signature in dark ink, appearing to read "Edward A. McDermott", with a long horizontal line extending to the right.

Edward A. McDermott



## Contents

Summary .....	Page vi
Introduction.....	1
Summary of Government Inventories of Strategic and Critical Materials December 31, 1962 .....	5
Status of Strategic Stockpile Inventories .....	6
Achievement of Stockpile Objectives .....	6
Strategic Stockpile Inventories as of December 31, 1962.....	6
List of Strategic and Critical Materials for Stockpiling.....	7
Other Materials in National Stockpile Inventory .....	8
Strategic Stockpile Inventories, Materials for Which There Are No Stockpile Objectives .....	8
Strategic Stockpile Inventories of Nonspecification Grades of Materials for Which There Are Stockpile Objectives.....	8
National Stockpile Activities.....	9
Procurement and Upgrading.....	9
Disposal Program.....	9
Disposal of Strategic Materials (Table) .....	10
Storage and Maintenance.....	11
Notes on Strategic and Critical Materials .....	12
Activities of the Department of Agriculture.....	13
Activities of the Department of the Interior.....	15
Reports Dealing With Stockpile Material Issued by U. S. Geological Survey.....	16
Reports Dealing With Strategic and Other Materials Issued by the Bureau of Mines .....	17
Status of Obligational Operations as of December 31, 1962.....	19
Total Obligations and Expenditures of Stockpiling Funds Cumulative and by Fiscal Period through December 31, 1962.....	20
Expenditures of Stockpile Funds, by Type Cumulative and for First Half Fiscal Year 1963 ...	21
Appendix A: Executive Stockpile Committee Report to the President, entitled Disposing of Excess Stockpile Materials .....	23

## Summary

The Executive Stockpile Committee appointed by President Kennedy has completed its study of the problem of excess stockpile materials. A report, entitled *Disposing of Excess Stockpile Materials*, was submitted to the President on January 16, 1963. The President approved the Committee's 14 recommendations. The Executive Stockpile Committee's report is included in Appendix A to this Report.

In a statement before the Subcommittee on the National Stockpile and Naval Petroleum Reserves of the Senate Committee on Armed Services, the Director, Office of Emergency Planning, identified several aspects of existing legislation which appear to require revision. (Page 1)

Disposals of soft goods (rubber, cordage fibers, feathers) have reduced closed storage requirements, some of which have been released. (Page 2)

The market value of all inventories of strategic materials on hand on December 31, 1962, was \$7,484,249,500. (Page 5)

Barter contracting decreased to \$9.8 million during July-December 1962. Negotiations in the preceding 6 month period totaled \$67.6 million. (Page 13)

The extra long staple cotton inventory formerly held in the Strategic Stockpile was transferred to the Commodity Credit Corporation on August 2, 1962. (Page 14)

Disposals of strategic materials worth \$31.6 million were made in the first six months of FY 1963. (Complete table on Page 10)

## Introduction

The comprehensive review of policies, methods and procedures of the national stockpiling program, initiated by the President on February 7, 1962, through the establishment of an Executive Stockpile Committee, continued to receive priority attention during the period covered by this report.

### EXECUTIVE BRANCH REVIEW

Under the chairmanship of the Director of the Office of Emergency Planning, the Executive Stockpile Committee consists of the Secretaries of State, Defense, the Interior, Commerce, and Labor, the Director of the Central Intelligence Agency, and the Administrator of the General Services Administration.

On March 19, 1962, the Committee reported to the President that it had completed its general review of the strategic concepts governing the determination of objectives; the scope of stockpile objectives and their relationship to domestic and foreign needs in wartime; supply-requirements procedures and their associated factoring system; and numerous aspects of management, including disposal.

The January-June 1962 Stockpile Report to the Congress included the revised text of Defense Mobilization Order V-7, General Policies for Strategic and Critical Materials Stockpiling, and the approved Report on the Barter Program submitted to the President by the Executive Stockpile Committee. The revision of General Policies and the Report on the Barter Program resulted from the Committee's studies in the first half of 1962.

Concurrently and continuing throughout the last half of the year, the Executive Stockpile Committee made an exhaustive study of the disposal aspects of stockpiling. A report by the Committee, entitled *Disposing of Excess Stockpile Materials*, was submitted to the President on January 16, 1963. On January 30, 1963, the President approved the fourteen recommendations in the report which was released on February 15, 1963. The complete text of this report is included in Appendix A of this Report.

In a statement before the Subcommittee on the National Stockpile and Naval Petroleum Reserves of the Senate Committee on Armed Services, the Director of the Office of Emergency Planning identified the following aspects of existing legislation which appear to require revision to make possible the development of long-range programs for the disposal of surpluses:

"Section 303(a) of the Defense Production Act of 1950, as amended, provides that metals and minerals may not be sold at less than the 'current domestic market price.' In the case of many commodities, producers offer materials for delivery in foreign markets at prices lower than they offer the same materials for delivery in this country. Because of this limitation on the price at which sales can be made, the Government is precluded from making sales of such surplus materials for deliveries in foreign markets because they cannot meet the prevailing prices for delivery in such markets.

"Section 303(b) of the Act limits sale of materials in this inventory to the period ending June 30, 1965. This short period is not adequate for the disposal of large quantities of surplus materials. It is my feeling that the Congress should take action to remove these limitations on disposals. This action was recommended to the last session of the Congress by the Office of Emergency Planning.

"There is adequate authority under the Defense Production Act to use surpluses to pay for the cost of upgrading quantities of materials held under the Act. At present such surpluses may also be used for upgrading materials in the National Stockpile. This authority is contained in the language of the stockpile appropriation to GSA. This method of disposal has been regularly approved by the Congress through the appropriation process. However, it is my opinion that to permit longer range planning an authorization of this type should be provided on a permanent basis.

"Present authority to dispose of materials held in the National Stockpile is very limited. In most cases it involves a six-month waiting period and express approval of the Congress. There have been instances of material shortages which could have been satisfied by the disposal of Government surpluses. However, by the time the statutory formalities were complied with the shortage no longer existed.

"Consideration should also be given to the problems involved with the inventories of materials held in the Supplemental Stockpile. These materials are excess to the requirements of national defense and therefore are surplus. Under the language of the present law, it is not possible to readily dispose of these materials. It would seem that they should be made avail-



able for disposal whenever an opportunity might present itself without the need for a case-by-case approval of the Congress and the delay attendant thereto.

"The desired changes in stockpile legislation could be obtained by requesting legislation which would amend the Defense Production Act of 1950, as amended, and the Strategic and Critical Materials Stock Piling Act, and the Agricultural Trade Development and Assistance Act of 1954, as amended. On the other hand, it would be possible to effect the same results through a single bill.

"Any legislative revision should continue the present provisions that, in disposing of materials, due regard be given to the protection of the United States against avoidable loss and the protection of producers, processors, and consumers against avoidable disruption of their usual markets. Procedural safeguards should be adopted to assure full consideration of the international aspects of each proposed disposal."

## SUPPLY-REQUIREMENTS STUDIES

### Limited War

The updating of information necessary to compute requirements for materials in a limited or conventional war period is continuing. Studies have been initiated in cooperation with Federal departments and agencies having emergency mobilization responsibilities to develop requirements estimates for steel, aluminum, copper, and nickel which have widespread use in the nation's industrial complex. These four materials are the "controlled materials" in the Defense Materials System.

The consolidated requirements of the claimant agencies are now being reviewed. One element of the review involves an analysis of the compatibility of the projected requirements with the actual demand for the controlled materials during a base period. Another element involves a determination of essentiality of the requirements in wartime. The testing and refining of estimates used in the review were substantially completed as this report was in preparation.

The revised requirements data for the "controlled materials" constitute a basis of reference in analyzing the supply-requirements position of a large proportion of the stockpile items, the objectives for which are scheduled for review during 1963.

### General War

At the time the Executive Stockpile Committee submitted its preliminary report to the President in March 1962, the guidance available for stockpile planning purposes for a nuclear war contingency was judged to be inadequate. Subsequently, an interagency committee was established to formulate approved planning assumptions in this and

other areas where guidance is lacking. The deficiency is expected to be remedied in the near future.

A target date for the completion of the nuclear war evaluations has not been set pending a judgment on the relative reliability level of certain data which have recently become available.

## MANAGEMENT

### Disposal Authorizations

Ten disposal authorizations were issued by the Office of Emergency Planning during the first half of fiscal year 1963. (See National Stockpile Activities, page 9.)

### Procurement

The fiscal year 1963 procurement authorization issued by the Office of Emergency Planning provides for the purchase of jewel bearings from the Government-owned contractor-operated plant at Rolla, North Dakota; upgrading of six materials by payment-in-kind to provide readily usable materials necessary to meet the initial surge in demand in time of emergency; and barter acquisitions of nominal amounts of seven other materials required to complete objectives.

July-December 1962 procurement of jewel bearings from the Government's Rolla, North Dakota, Turtle Mountain Ordnance Plant, has continued to be confined to newer types of bearings, which are either military standard bearings or common-use items currently being incorporated in essential military end-items.

Official Government price lists for Rolla jewel bearings have been developed and distributed. In force also are military standards for jewel bearings, and Amendment 1-315 to the Armed Services Procurement Regulations which requires defense contractors and subcontractors to procure from the Rolla facility all jewel bearings which are to be incorporated in military end-products. As a consequence, a growing volume of military orders is flowing into Rolla. These orders are being given priority over stockpile items.

Improvements in the Rolla plant have been planned in order to meet growing defense orders, increase the production volume, and reduce costs. The increase in production, when combined with the stockpile, will make adequate provision within the United States for essential jewel bearings requirements in time of emergency.

### Storage, Security, and Maintenance Policies

Some of the warehouse space constructed some years ago with stockpile funds was released for other Government use in 1962. The reduced space requirements in certain facilities resulted from (a) decreased rubber and cordage fiber inventories; (b) the gradual withdrawal of inventories from locations identified as strategically vulnerable to destruction by enemy attack on the conti-

mental United States; and collaterally (c) the availability of safer space into which rotation receipts have been and are being shipped.

The matter of relocating small quantities of a number of stockpile materials has been given additional study and plans were completed early in 1963. In 1961, storage policies were revised to permit the use of a new method for evaluating the probable security of storage locations under nuclear warfare conditions. Due to budgetary limitations, some of the stockpile materials, identified for relocation to increase their probable availability after possible nuclear attack on the United States, have not as yet been transferred to safer locations. The planning for this relocation is substantially completed. The funds necessary to carry out the plans are included in the fiscal year 1964 budget request.

The addition of over 25 upgraded forms of basic strategic materials to the list for stockpiling in recent years requires new storage plans and substantial revision of the Storage Manual. Each form of strategic material requires a separate distribution pattern, and sometimes special storage and security standards. In the July-December 1962 period, seven storage plans were issued and 14 storage manual instructions were revised.

#### Postattack Planning

A procedure is being developed whereby the emergency release and allocation of National Stockpile and Defense Production Act inventories

of strategic materials may be effected at Office of Emergency Planning regional levels in case communications with the central control offices are cut off as a result of enemy attack on the United States.

#### Summary Inventory Reporting

A study of inventory reporting has been initiated for the purpose of bringing into a single listing all of the various grades, types, and qualities of strategic materials on hand in the various accounts. Although the official list of strategic materials covers only 76 basic name-forms, such as manganese, copper, and chromium, there are over 300 types, grades, and forms in inventory. The new listing is expected to include sufficient data to show the various qualities of materials in order of magnitude and should facilitate management selection of materials for possible disposal.

#### LEGISLATIVE INQUIRY

The Subcommittee on the National Stockpile and Naval Petroleum Reserves of the Senate Committee on Armed Services, chaired by Senator Stuart Symington, began hearings on numerous phases of National Stockpile policies and programs on March 28, 1962. The hearings were completed on January 30, 1963 and the testimony given during these hearings has been published in a series of documents entitled "Inquiry into the Strategic and Critical Materials Stockpiles of the United States."



# Summary of Government Inventories of Strategic and Critical Materials

December 31, 1962

(Dollar values based on December 31, 1962, market prices)

Total of Maximum Objectives for Strategic Stockpile: \$4,245,329,600

	<i>Market Value*</i>
<b>I. <u>Total Inventories</u></b>	<b><u>\$ 7,484,249,500</u></b>
Strategic Stockpile.....	5,455,517,300
Defense Production Act.....	864,219,900
Commodity Credit Corp.....	58,525,700
Supplemental Stockpile .....	1,105,986,600
<b>II. <u>Inventories Within Strategic Stockpile Objectives</u></b>	<b><u>4,214,852,000</u></b>
Strategic Stockpile.....	3,865,757,500
Defense Production Act.....	139,827,400
Commodity Credit Corp.....	23,831,800
Supplemental Stockpile .....	185,435,300
<b>III. <u>Inventories Excess to Strategic Stockpile Needs</u></b>	<b><u>3,269,397,500</u></b>
<b><u>Stockpile Grades of Materials With Objectives.....</u></b>	<b><u>3,030,452,600</u></b>
Strategic Stockpile.....	1,504,490,300
Defense Production Act.....	602,278,000
Commodity Credit Corp.....	20,471,200
Supplemental Stockpile .....	903,213,100
<b><u>Non-Stockpile Grades of Materials With Objectives</u></b>	<b><u>141,898,500</u></b>
Strategic Stockpile.....	48,026,700
Defense Production Act.....	91,701,300
Commodity Credit Corp.....	0
Supplemental Stockpile .....	2,170,500
<b><u>Materials Without Objectives</u></b>	<b><u>97,046,400</u></b>
Strategic Stockpile.....	37,242,800
Defense Production Act.....	30,413,200
Commodity Credit Corp.....	14,222,700
Supplemental Stockpile .....	15,167,700

\*Market values are computed from prices at which similar materials are being traded currently; or, in the absence of current trading, an estimate of the price which would prevail in commercial markets. The values are generally unadjusted for normal premiums and discounts relating to contained qualities. The value does not necessarily reflect the amount that would be realized at time of sale.

Source: General Services Administration.

## Status of Strategic Stockpile Inventories

### ACHIEVEMENT OF STOCKPILE OBJECTIVES

On December 31, 1962, National Stockpile inventories of the 76 materials, for which there are official stockpile objectives, equaled or exceeded the maximum objectives for 52 materials and the basic objectives for 62 materials.

Quantities of materials in other Government-owned inventories, if transferred to the National Stockpile, would increase to 65 the number of maximum objectives and to 70 the number of basic objectives met by total quantities on hand as of December 31, 1962. Quantities on order for all inventories would complete three additional maximum objectives.

Basic objectives assume partial dependence during an emergency on areas beyond North America, and maximum objectives provide a higher degree of security by completely discounting emergency supply from distant overseas sources.

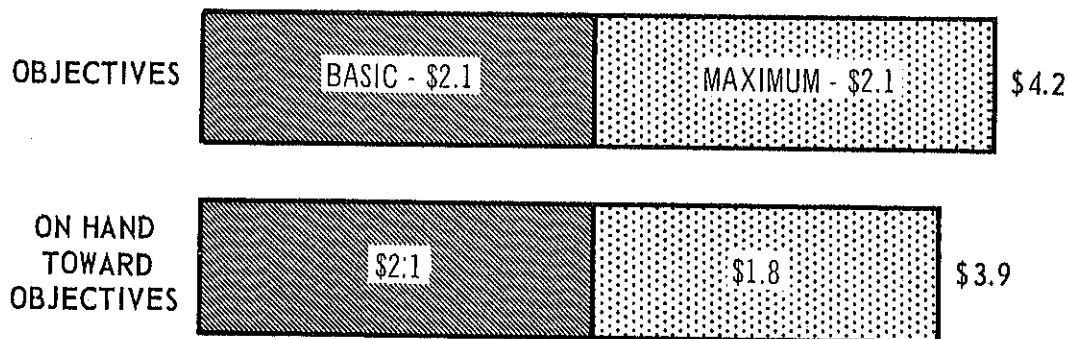
Stockpile objectives as now computed are keyed primarily to limited war conditions, when most domestic productive capacity would probably be available, but foreign sources of supply might be

interrupted. Total present maximum stockpile objectives would be expected to meet less than one-third of the total requirements for a three-year war period. The proportion of stockpile supply to total war requirements would vary from less than five percent for materials available from relatively dependable domestic and nearby foreign sources to one hundred percent for materials that would not be available in an emergency from those sources.

The emergence of missile and nuclear warfare techniques has become an increasingly important consideration in strategic materials planning, requiring increased attention to the state of readiness to supply needed materials in the event of an emergency, including attention to the vulnerability, or probable availability, of domestic-producing facilities and of stockpiles.

The extent of National Stockpile objectives and inventories on hand to meet these objectives is indicated in Figure 1. National Stockpile objectives call for materials valued at \$4.2 billion, of which \$2.1 billion are applicable to basic objectives and \$2.1 billion are applicable to maximum objectives.

**Fig. 1 STRATEGIC STOCKPILE INVENTORIES  
AS OF DECEMBER 31, 1962  
(IN BILLIONS OF DOLLARS)**



Strategic materials are held, however, in three accounts additional to the National Stockpile. The Defense Production Act inventory contains materials acquired since 1950 as a result of the expansion of defense production, and the Commodity Credit Corporation account and Supplemental Stockpile include strategic materials exchanged for surplus agricultural commodities. The market value of all four inventories on December 31, 1962 was about \$7.5 billion. A complete breakdown of the inventories is shown in the table on page 5.

The List of Strategic and Critical Materials for Stockpiling follows. Achievement of stockpile objectives is shown in this table only if the materials are actually in the National Stockpile. Footnotes indicate when other Government inventories, if combined with National Stockpile quantities, would complete the stockpile objectives. Also footnoted are those materials for which upgrading objectives, in effect as of December 31, 1962, had not been achieved.

*List of Strategic and Critical Materials for Stockpiling (for the Strategic Stockpile)*

December 31, 1962

Materials	Specification grade strategic stockpile inventory equals or exceeds (x)	
	Basic objective	Maximum objective
Total.....	62	52
1. Aluminum.....	x	( <sup>1</sup> )
2. Aluminum Oxide, Fused, Crude.....	x	x
3. Antimony.....	( <sup>1</sup> )	
4. Asbestos, Amosite.....	( <sup>1</sup> )	( <sup>2</sup> )
5. Asbestos, Chrysotile....		
6. Bauxite, Metal Grade, Jamaica Type.....	( <sup>1</sup> )	( <sup>1</sup> )
7. Bauxite, Metal Grade, Surinam Type.....	x	( <sup>1</sup> )
8. Bauxite, Refractory Grade.....	x	x
9. Beryl.....	x	x
10. Bismuth.....	( <sup>1</sup> )	( <sup>1</sup> )
11. Cadmium.....	x	x
12. Castor Oil.....	x	( <sup>3</sup> ) x
13. Celestite.....		
14. Chromite, Chemical Grade.....	x	x
15. Chromite, Metallurgical Grade.....	x	x
16. Chromite, Refractory Grade.....	x	( <sup>2</sup> )
17. Cobalt.....	x	x
18. Columbium.....	x	( <sup>3</sup> ) x
19. Copper.....	x	( <sup>3</sup> ) x
20. Cordage Fibers, Abaca...	x	x
21. Cordage Fibers, Sisal...	x	x
22. Corundum.....	x	x
23. Diamond Dies, Small....		

Materials	Specification grade strategic stockpile inventory equals or exceeds (x)	
	Basic objective	Maximum objective
24. Diamond, Industrial: Crushing Bort.....	x	x
25. Diamond, Industrial: Stones.....	x	( <sup>1</sup> )
26. Feathers and Down, Waterfowl.....	x	x
27. Fluorspar, Acid Grade...	x	x
28. Fluorspar, Metallurgical Grade.....	x	x
29. Graphite, Natural--Ceylon, Amorphous Lump....	x	x
30. Graphite, Natural--Madagascar Crystalline....	x	x
31. Graphite, Natural--Other than Ceylon and Madagascar Crystalline	x	x
32. Hyoscine.....	x	x
33. Iodine.....	x	
34. Jewel Bearings.....		
35. Kyanite-Mullite.....	x	x
36. Lead.....	x	x
37. Magnesium.....	x	x
38. Manganese, Battery Grade, Natural Ore.....	x	x
39. Manganese, Battery Grade, Synthetic Dioxide.....	x	x
40. Manganese, Chemical Grade, Type A Ore.....	x	x
41. Manganese, Chemical Grade, Type B Ore.....	( <sup>1</sup> )	( <sup>1</sup> )
42. Manganese, Metallurgical Grade.....	x	( <sup>1</sup> ) ( <sup>3</sup> )
43. Mercury.....	x	x
44. Mica, Muscovite Block, Stained A/B and Better	x	( <sup>1</sup> )
45. Mica, Muscovite Film, First and Second Qualities.....	x	( <sup>1</sup> )
46. Mica, Muscovite Splittings.....	x	x
47. Mica, Phlogopite Block..	x	x
48. Mica, Phlogopite Splittings.....	x	x
49. Molybdenum.....	x	x
50. Nickel.....	x	x
51. Opium.....	x	x
52. Platinum Group Metals, Iridium.....	x	x
53. Platinum Group Metals, Palladium.....	( <sup>1</sup> )	( <sup>1</sup> )
54. Platinum Group Metals, Platinum.....	x	x
55. Pyrethrum.....	x	x
56. Quartz Crystals.....	x	x
57. Quinidine.....	x	x
58. Rare Earths.....	x	x
59. Rubber, Crude Natural...	x	x
60. Rutile.....	x	( <sup>1</sup> )
61. Sapphire and Ruby.....		
62. Selenium.....	( <sup>1</sup> )	
63. Shellac.....	x	x

Materials	Specification grade strategic stockpile inventory equals or exceeds (x)	
	Basic objective	Maximum objective
64. Silicon Carbide, Crude..	( <sup>1</sup> )	( <sup>1</sup> )
65. Silk Nails.....	x	x
66. Silk, Raw.....	( <sup>2</sup> )	( <sup>2</sup> )
67. Sperm Oil.....	x	x
68. Talc, Steatite, Block and Lump.....	x	x
69. Tantalum.....	x	( <sup>1</sup> ) ( <sup>3</sup> )
70. Tin.....	x	x
71. Tungsten.....	x	( <sup>3</sup> ) x
72. Vanadium.....	x	x
73. Vegetable Tannin Extract, Chestnut.....	x	x
74. Vegetable Tannin Extract, Quebracho.....	x	x
75. Vegetable Tannin Extract, Wattle.....	x	x
76. Zinc.....	x	x

<sup>1</sup>Sufficient quantities are on hand in total Government-owned inventories to complete the objective.

<sup>2</sup>Total quantities on hand in and on order for all Government-owned inventories are virtually sufficient to complete the objective.

<sup>3</sup>Although total quantities are equal to the maximum objective, the upgrading program has not been completed.

#### OTHER MATERIALS IN THE NATIONAL STOCKPILE INVENTORY

In addition to inventories of specification-grade materials, the National Stockpile contains (1) non-specification grades of materials for which there are stockpile objectives, and (2) materials that have been removed from the stockpile list and others for which there are no objectives. The amounts of each of these materials on hand as of December 31, 1962 are shown in the following tables.

Most of the nonspecification-grade stocks were acquired by transfer of Government-owned surplus materials. Some of these were accepted as contract termination inventories after World War II. Others were accepted under stockpile specifications now outmoded for such reasons as changes in industry practice and technological advances; others were taken with a view to processing them to specification grade if this were necessary in order to meet emergency demands. Disposal action for many of these items has been authorized by OEP. Changes in the lists since June 30, 1962 are due primarily to disposals, reclassification, and other adjustments of the inventories.

#### Strategic Stockpile Inventories,\* Materials for Which There Are No Stockpile Objectives

As of December 31, 1962

Material	Unit	Quantity
Asbestos, Crocidolite (Soft)...	ST	1,567
Coconut Oil.....	Lb.	116,088,033
Diamond Dies, Other Than Small	Pc.	355
Diamond Tools.....	Pc.	64,178
Mica, Muscovite Block, Stained B and Lower.....	Lb.	4,621,016
Mica, Muscovite Film, 3d Quality.....	Lb.	513,181
Palm Oil.....	Lb.	28,604,089
Platinum Group Metals, Rhodium	Tr.Oz.	621
Quinine.....	Oz.	7,633,732
Quinine, Hydrochloride of.....	Oz.	103
Silk Waste.....	Lb.	1,040,021
Talc, Steatite, Ground.....	ST	3,901
Totaquine.....	Oz.	7,654,196
Zirconium Ore, Baddeleyite....	SDT	16,533
Zirconium Ore, Zircon.....	SDT	7,082

\*Quantities may be shown on this table and also on the disposal table when sales commitments have been made, but the material has not moved out of inventory.

Source of data: General Services Administration.

#### Strategic Stockpile Inventories of Nonspecification Grades of Materials for Which There Are Stockpile Objectives

As of December 31, 1962

Material	Unit	Quantity
Aluminum.....	ST	1,787
Bismuth.....	Lb.	36,580
Cadmium.....	Lb.	1,088,225
Celestite.....	SDT	28,816
Chromite, Metallurgical Grade..	SDT	197
Columbium.....	Lb.	1,362,279
Diamond Dies, Small.....	Pc.	8,371
Fluorspar, Acid Grade.....	SDT	4,960
Graphite, Natural--Madagascar, Crystalline.....	ST	1,887
Graphite, Natural--Other than Ceylon and Madagascar, Crystalline.....	ST	672
Jewel Bearings.....	Pc.	14,715,973
Magnesium.....	ST	2,087
Manganese, Metallurgical Grade	SDT	621,304
Mica, Muscovite Block, Stained A/B and Better.....	Lb.	347,600
Mica, Muscovite Film, 1st and 2d Qualities.....	Lb.	23,674
Mica, Phlogopite Block.....	Lb.	206,490
Opium.....	Lb.	2,180
Platinum Group Metals, Platinum	Tr.Oz.	33
Quartz Crystals.....	Lb.	841,122
Talc, Steatite, Block and Lump	ST	40
Tantalum.....	Lb.	1,881,027
Tungsten.....	Lb.	16,229,734
Vanadium.....	Lb.	27,908

Source of data: General Services Administration.

## National Stockpile Activities

### PROCUREMENT AND UPGRADING

The Strategic Stockpile Procurement Directive for the fiscal year 1963 provides for the cash procurement of jewel bearings and the acquisition through barter of antimony, chrysotile asbestos, celestite, chromite--refractory grade, small diamond dies, iodine, and selenium. Included in the directive is the authority to upgrade materials in the stockpile to columbium metal, columbium carbide powder, oxygen-free copper, sebacic acid, tantalum metal, and tantalum carbide powder. Materials which have been authorized for disposal from the stockpile will be used as payment in kind to meet upgrading costs where this is feasible and advantageous to the Government.

Under upgrading contracts made in accordance with previous authorizations, deliveries continue to be made of columbium and tantalum metal powders which have been converted from columbium-tantalum bearing materials, oxygen-free copper, and sebacic acid processed from castor oil.

During the July-December 1962 period covered by this report, deliveries were completed of: molybdic oxide and ferromolybdenum which had been converted from molybdenite, carbon reduced tungsten metal powder which had been upgraded from tungsten concentrates, and ferrovanadium processed from vanadium oxide.

### DISPOSAL PROGRAM

During July-December 1962, disposal commitments totaled approximately \$31.6 million in gross sales value. Of this amount, disposals from the National Stockpile totaled \$29 million, and disposals of materials from the Defense Production Act inventory accounted for \$2.6 million.

During the report period, the Office of Emergency Planning approved seven disposal plans developed by GSA and concurred in by all in-

terested agencies. The plans covered Grade "H" aluminum (DPA), cadmium, DPA nickel for foreign aid programs, DPA titanium sponge, low-grade tungsten ores and concentrates, vegetable tannin--chestnut, and an amended plan for rutile chlorinator charge material from the DPA inventory.

Notices of proposed disposals were published in the Federal Register or were publicly announced for all of these materials, with the exception of the rutile chlorinator charge material which had been announced in a previous period under the original authorization. The notice on the chestnut tannin covers 12,245 long tons and was published in the Federal Register in August. Public Law 87-720 waives the waiting period on 4,000 long tons. Of this latter quantity, 1,000 long tons have been advertised for sale.

In addition, announcement was made in July of the proposed release of 20,000 short tons of DPA aluminum for use in foreign aid programs exclusively.

GSA was also authorized by OEP to release quantities of mica, lead, and titanium from the DPA inventory for specialized purposes or for direct Government use.

During the period, GSA continued intensified efforts to channel maximum quantities of excesses into domestic and foreign government use programs. GSA has developed programs with AID for greater use of rubber, aluminum, nickel, and tin. A program was also worked out with DOD for use of excess stockpile rubber in the procurement of tires and related materials. In accordance with the OEP authorization of June 11, 1962, the incremental rubber utilized in the AID and DOD programs is additional to the disposal quota authorized.

The following table lists materials sold from the National Stockpile and DPA inventories during July-December 1962.



*Disposal of Strategic Materials*

July-December 1962

Material	Unit	Sales commitments	
		Quantity	Sales value
NATIONAL STOCKPILE INVENTORY:			
Brass scrap.....	ST	126	\$55,194
Castor oil.....	Lb.	14,412,310	2,088,968
Chromite, metallurgical.....	LT	1,890	17,010
Chromium metal.....	ST	2	1,488
Cobalt metal.....	ST	9	23,936
Cobalt oxide.....	Lb.	265,000	416,302
Coconut oil.....	Lb.	17,931,640	1,890,781
Cordage fibers, abaca.....	Lb.	4,902,725	753,768
Cordage fibers, sisal.....	Lb.	9,983,000	1,125,488
Ferromanganese.....	ST	63	2,375
Ferromanganese fines.....	ST	645	24,317
Graphite.....	ST	1,907	60,000
Kyanite and mullite.....	ST	3,213	80,325
Magnesium ingots.....	ST	210	135,210
Manganese metal, electrolytic.....	ST	4.5	1,170
Nickel ingots.....	ST	96	99,000
Nickel sintered powder.....	ST	4	5,822
Nickel oxide powder.....	Lb.	229,787	185,554
Platinum scrap.....	Tr.Oz.	4,471	281,064
Quartz crystals, crude.....	Lb.	39,273	52,663
Quinidine.....	Oz.	100,000	71,075
Quinine--sulphate powder.....	Oz.	2,521,512	594,250
Rubber.....	LT	28,886	17,224,948
Shellac.....	Lb.	316,456	52,470
Silk noils.....	Lb.	372,887	103,563
Silk waste.....	Lb.	340,096	141,646
Talc, steatite block and lump.....	ST	14	2,268
Tin.....	LT	1,400	3,436,314
Totaquine.....	Oz.	7,654,416	30,730
Vegetable tannin extract, quebracho.....	LT	239	40,162
Vegetable tannin extract, wattle.....	LT	50	7,840
Zinc foil.....	ST	106	17,047
Total National Stockpile.....			\$29,022,757
DEFENSE PRODUCTION ACT INVENTORY:			
Aluminum.....	ST	35	\$16,736
Cobalt metal.....	Lb.	17,149	30,868
Copper.....	ST	274	173,406
Cryolite (synthetic).....	ST	910	118,300
Lead.....	ST	1,340	238,808
Manganese ore, low-grade.....	LT	136,233	1,089,864
Mica, muscovite block.....	Lb.	1,158	26,609
Nickel.....	Lb.	1,163,759	891,750
Total DPA.....			\$2,586,341
Grand total.....			\$31,609,098

Source: General Services Administration.

## STORAGE AND MAINTENANCE

On December 31, 1962, strategic and critical materials were stored at 170 locations as follows:

Type of facility	As of 12/31/62	Net change in last 6 months
Military depots.....	54	- 3
GSA depots.....	24	+ 2
Other Government-owned sites.....	10	0
Industrial plantsites.....	39	0
Leased commercial sites....	16	+ 1
Commercial warehouses.....	27	-38*
Total.....	170	-38

\*35 locations storing cotton were transferred to the Department of Agriculture.

Approximately 50.6 million tons of materials were stored at these facilities. About 1.2 million tons were received during the July-December 1962 reporting period, of which 97% originated on CCC contracts, 1% on SCM contracts, and 2% on DPA contracts. Quality maintenance inspec-

tions totaling 1,479 were made of materials in inventory.

During the report period, 76 new preservation and maintenance projects were authorized, and 90 previously authorized projects were completed.

Large quantities of rubber and cordage fiber are being transferred from the Louisville Medical Depot, which is scheduled for inactivation by the Department of Defense early in 1963. In addition, two commercial warehouses were evacuated at Mansfield, Ohio and Winchester, Kentucky. The transfer of rubber and cordage fiber from the Louisville Depot will result in an annual savings of \$200,000 in recurring stockpile storage charges. The transfer of the cotton stockpile to the Department of Agriculture will effect a \$543,000 decrease in annual storage costs of the National Stockpile program. Evacuation of the two commercial warehouses at Mansfield and Winchester will result in annual savings of \$14,000. A further reduction of stockpile storage costs by \$167,800 per year is due to the disposal of materials during the period. To date, disposal sales have accounted for a total reduction of \$412,800 in stockpile storage costs per year.

## Notes on Strategic and Critical Materials

### ALUMINUM

Between July and December, 19,679 short tons of primary aluminum were delivered to the Government under the one contract that remains open for this metal under the Defense Production Act expansion program.

### ASBESTOS

Deliveries under the largest of the three contracts made for Arizona chrysotile asbestos were completed during the period. The other two contracts are in default. If the remaining 47 short tons due under these contracts cannot be obtained from domestic suppliers to meet the Purchase Specification, consideration may be given to acquiring this quantity through barter.

### CORDAGE FIBERS

There was no rotation of cordage fibers as funds were not appropriated for this purpose.

### COTTON

The balance of 170,491 bales (various sizes--not converted to 500 lb. equivalent bales) of extra long staple cotton which remained in the stockpile was transferred to the Commodity Credit Corporation in accordance with Public Law 87-548 enacted July 25, 1962. (See Activities of the Department of Agriculture.)

### DIAMOND DIES, SMALL

By Stockpile Objective Action, OEP increased the objective for diamond dies. The fiscal year 1963 procurement directive provides for the ad-

ditional dies to be acquired through barter. Deliveries continue under current contracts for both domestically and foreign produced dies, but the percentage of rejections remains high due to non-conformance with stockpile specifications. To overcome the problem of acquisition of fine wire required for testing purposes, OEP authorized GSA to accept and inspect dies for the stockpile, using microscopic methods of examination. GSA continues to attempt to develop new sources for testing wires in diameters below 0.0003 inches, since wire drawing tests are considered to be of greater value in determining the quality of a die. An attempt was made to purchase dies to replace those defaulted by several suppliers.

### MANGANESE

During the period, in coordination with OEP, GSA continued efforts toward implementation of the disposal of 351,518 long dry tons of low grade manganese ores at Butte-Philipsburg and acquisition of 65,000 short tons of silicomanganese. During the report period, GSA accepted offers to buy 136,233 long dry tons. Proposals for the conversion of the balance of these ores to silicomanganese were being evaluated at the end of the period.

### MICA

The Domestic Purchase Program quantity limitation of 25,000 short tons of hand-cobbed mica was acquired during the previous report period. Two of the three mica purchase depots completed all processing of mica on hand and were shut down by the end of December. The third depot was scheduled to shut down in January 1963.

## Activities of the Department of Agriculture Relating to the Stockpiling of Strategic and Critical Materials

### EXPANSION OF DOMESTIC SOURCES

Further progress was made in production and engineering research projects which are designed to improve and expand domestic sources of supply substitutes for strategic agricultural items:

**Planting materials.**—Chemical analyses have been completed on *canaigre* breeding lines and recent introductions grown during the 1961-62 crop year. Planting of the most promising material from these sources is under way in permanent living germplasm banks on public land. Completion of these plantings in the near future will terminate active research on *canaigre*.

**Diseases.**—The new method developed for testing resistance to *Botrytis* capsule mold in *castor* beans was reported previously. High correlations between test results and field resistance have been obtained. This research accomplishment will greatly simplify breeding for resistance to *Botrytis*.

Defoliation studies were conducted on castor beans in California, some of which had attained eight of 14 feet before harvest. Chemicals

which were effective last year had to be applied in this year to produce the results desired. The intensive studies will be conducted to compare the plant for harvest at a minimum of cost. In connection with an attempt to grow castor beans farther north in Nebraska, a new type of harvester has been constructed for gleaning the beans. Also, because these castor beans are less mature, some artificial drying is anticipated and studies of the equipment needed have been initiated.

### Large Fibers

**Kenaf.**—Methyl Bromide fumigation of Everglades peat soil heavily infested with root-knot and other nematodes increased yield of fiber by about 60 percent. In fertility studies on Everglades peat soil, kenaf yields were increased by applications of 50 to 100 pounds of K (potassium) per acre. Higher rates of K had a depressing effect on yield. Yields also were depressed by the application of as little as 50 pounds of N (nitrogen) per acre.

Cytological analysis of a hybrid between *H. sabdariffa* and *H. meeusei*, indicated the first instance of a successful interspecific cross involving either of these species.

Kenaf produced from kenaf grown at Tifton,

Georgia, and on the muck and mineral soils near Belle Glade, Florida, was harvested, retted, cleaned, and baled for shipment to two commercial companies who are cooperating in evaluating the end-use value. This fiber will be processed in the next few weeks and a report will be prepared as a guide for further machinery and processing research investigations.

A commercial contract has been awarded for the construction of a harvester-ribboner for Sudan on specifications furnished by this project. The machine should be ready for shipment soon.

**Sansevieria.**—One hundred eight  $F_2$  clones (*S. trifasciata* x *S. deserti*) were sampled for fiber percentage. Percentages ranged from .54 percent to 3.72 percent on a green weight basis. This is compared to a mean fiber percentage of 2.30 percent for the best  $F_1$  clone, Florida H-13, of 1.67 percent for *S. trifasciata*, and of 1.83 percent *S. deserti*. Nineteen  $F_2$  clones showed fiber percentages above 2.30 percent. The best  $F_2$  clones will be increased and yield tested.

**Chemicals.**—Seed stocks of *Atropa belladonna*, *Digitalis purpurea* and *Papaver somniferum* (opium poppy) are being maintained under optimum temperature-humidity levels. These stocks, subject to periodic germination tests, are being held to assure minimum production requirements in event of emergency.

### BARTER ACTIVITIES

Under authority for barter contained in the Commodity Credit Corporation Charter Act, the Agricultural Trade Development and Assistance Act of 1954, and related legislation, as amended, the CCC negotiated nine barter contracts for strategic and other materials valued at approximately \$9.8 million during July-December 1962. By comparison, 25 contracts valued at approximately \$67.6 million were negotiated in the preceding six months and 17 contracts valued at \$44.7 million were negotiated in the same period in 1961.

A thorough study of the barter program was in progress during the report period and barter activity was diminished pending announcement of eligible materials and new program rules. Agricultural commodity exports by contractors in fulfillment of barter contracts with CCC totaled approximately \$29.6 million for the period covered by this report, a decrease of approximately \$79.9 million from the January-June 1962 reporting period.

Strategic and other materials valued at approximately \$1,417.6 million have been delivered under barter contracts from July 1954 through December 1962, of which materials worth approximately \$51.7 million were delivered during the July-December 1962 period. Cumulative transfers to stockpile since July 1954 have totaled approximately \$1,355.9 million (\$151.5 million to the National and \$1,204.4 million to the Supplemental Stockpiles).

#### TRANSFERS FROM STOCKPILE FOR DISPOSAL

##### Extra Long Staple Cotton

In 1951 and 1952, approximately 269,000 bales of extra long staple cotton were purchased by the Department and placed in the National Stockpile established pursuant to the Strategic and Critical Materials Stock Piling Act. Of this quantity, about 97,500 bales were of American growth and

about 172,000 bales (converted to 500 lb. equivalent bales) were of Egyptian and Sudanese origin. Early in 1957 extra long staple cotton was removed from the List of Strategic and Critical Materials. Under P.L. 85-96 dated July 1, 1957, Congress authorized the release for sale by the Commodity Credit Corporation of 50,000 bales of domestically-produced stockpile cotton.

Public Law 87-548, approved by the President on July 25, 1962, provides that all extra long staple cotton remaining in the National Stockpile established pursuant to the Strategic and Critical Materials Stock Piling Act, as amended, shall be withdrawn and transferred or made available to the Commodity Credit Corporation for disposition. An agreement was signed on August 2, 1962, under which the General Services Administration transferred all rights, title, and interest in the cotton to the Commodity Credit Corporation.

A table showing the approximate sales of long staple cotton up to December 31, 1962 follows:

ACQUISITIONS AND DISPOSALS OF EXTRA LONG STAPLE COTTON  
(500 lb. bale equivalent)

	Domestic	Foreign	Total
Acquired for the National Stockpile in 1951 and 1952.....	97,500	172,000	269,500
Authorized for sale by P.L. 85-96, July 1, 1957.....	50,000		
Sales, July 1, 1957 to June 30, 1962.....	43,800		
Available June 30, 1962.....	6,200		
Additionally authorized for sale by P.L. 87-548, July 25, 1962.....	47,500	172,000	219,500
Total available on June 30, 1962.....	53,700		
Sales, June 30, 1962 to December 31, 1962.....	5,300		
Balance available December 31, 1962.....	48,400	172,000	220,400

## Activities of the Department of the Interior Relating to the Stockpiling of Strategic and Critical Materials

### BERYLLIUM

The Department of the Interior continued its comprehensive program on beryllium resources and research on developing beneficiation methods to recover disseminated beryl and other beryllium minerals, and developing techniques to extract, purify, and cast beryllium.

Good progress was made in extracting beryllium from low-grade beryllium mineral concentrate by carbiding and subsequent treatment with anhydrous hydrogen fluoride, and converting beryllium fluoride to beryllium oxide. Spectrochemical methods were developed for determining beryllium in the concentration range 0.0015 to 4 percent in siliceous mineral products. Spectrochemical procedures were also developed for determining trace amounts of 18 impurity elements in high-purity beryllium and beryllium oxide.

### COLUMBIUM

The Bureau of Mines published results of an investigation of the properties of columbium-hafnium alloys; those with 49 to 66 percent hafnium exhibited tensile strengths of over 100,000 psi and good oxidation resistance up to 800° C.

### COPPER-MOLYBDENUM

A belt of mineralized rock adjacent to a large fault has been found by a Survey geologist near San Juan, Puerto Rico. The ore minerals are chiefly chalcopyrite with significant amounts of molybdenite. Companies holding exploration permits are prospecting with geochemical and geophysical techniques.

### FLUORSPAR

Industry has continued to show a keen interest in the sodium fluoride-lignin sulfonate method of beneficiating complex fluorspar ores developed by the Bureau of Mines. Research is continuing on the development of this process to treat Illinois, Kentucky, and Tennessee ores to increase recovery and quality of concentrates, and reduce costs of flotation.

### KYANITE-MULLITE

Cooperative research by the Bureau of Mines and a private company resulted in construction of

a kyanite flotation plant by the company at Washington, Georgia. Annual production capacity is about 9,000 tons per year of minus 35-mesh kyanite concentrate.

### MICA

Research on synthetic mica is being conducted by the Bureau of Mines along two principal lines: Production of large single crystals of normal fluor-phlogopite and preparation of suitable paperlike material from water-swelling synthetic micas. Possible methods of improving the electrical resistance and power factor of the thin sheets of reconstituted water-swelling micas are being studied. A new type of furnace is being developed as a possible means of solving the perennial problem of growing single-crystal synthetic mica large enough for use in various sheet-mica applications.

### RARE-EARTH ELEMENTS

The Bureau of Mines continued its research program on the extraction, electrowinning, solid-state electrolytic refinement, and property determination of yttrium and rare-earth metals. Solvent extraction techniques were developed to allow improved separation of rare-earth mixtures into groups and into purified feed materials used in the electrowinning of pure metals. New high-temperature, electrolytic cells were constructed to allow preparation of high-purity yttrium, lanthanum, and neodymium metals from their oxides, and methods to tap metal directly from crucibles were investigated in the effort to develop continuous method techniques. Migration of impurities in electrolytically refined rare-earth metal bars was determined by radio-chemical means.

### TIN-BERYLLIUM

Further field work by the Geological Survey in the York Mountains, Alaska, has located another area of sulfide-bearing altered rock similar to the known tin-bearing material at the Lost River mine. The new tin-bearing area is a mile southeast of the mine. In addition, a new beryllium-bearing fluoritized limestone has been found about 5 miles west of the mine.

# **Reports Dealing With Stockpile Material Issued by U.S. Geological Survey**

**July-December 1962**

## **Mineral Resource Maps**

- MR-25     Tungsten in the United States, exclusive of Alaska and Hawaii, by D. M. Lemmon and O. L. Tweto.
- MR-28     Thorium and rare earths in the United States, exclusive of Alaska and Hawaii, by J. C. Olson and J. W. Adams.
- MR-29     Titanium in the United States, exclusive of Alaska and Hawaii, by C. L. Rogers and M. C. Jaster.
- MR-31     Talc and soapstone in the United States, exclusive of Alaska and Hawaii, by A. H. Chidester and H. W. Worthington.
- MR-32     Lode gold and silver occurrences in Alaska, by E. H. Cobb.
- MR-34     Silver in the United States, exclusive of Alaska and Hawaii, by E. T. McKnight, W. L. Newman, H. Klemic, and A. V. Heyl, Jr.
- MR-35     Beryllium in the United States, exclusive of Alaska and Hawaii, by W. R. Griffitts, D. M. Larrabee and J. J. Norton.

## **Professional Papers**

- 297-B     Geology of the Hugo pegmatite, Keystone, South Dakota, by J. J. Norton, L. R. Page, and D. A. Brobst. (Feldspar, lithium minerals, mica, beryl, and tantalite-columbite)
- 342       Geology and ore deposits of the Globe-Miami district, Arizona, by N. P. Perterson. (Copper)
- 345       Petrology and geochemistry of selected talc-bearing ultramafic rocks and adjacent country rocks in north-central Vermont, by A. H. Chidester.
- 406       The Eureka mining district, Nevada, by T. B. Nolan. (Gold, silver, lead, zinc)
- 450-A     Geological Survey Research, 1962, Synopsis of geologic, hydrologic and topographic results.

## **Bulletins**

- 1122-A     Geology of the Spruce Pine District, North Carolina, by D. A. Brobst. (Mica, feldspar, kaolin)
- 1122-E     Geology and fluorspar deposits of the Levias-Keystone and Dike-Eaton areas, Crittenden County, Kentucky, by R. D. Trace.
- 1135-A     Oxidized zinc deposits, part 1, General Geology, by A. V. Heyl and C. N. Bozlon.

## **Circular**

- 475       Mineralization associated with a magnetic anomaly in part of the Ely quadrangle, Nevada, by A. L. Brokaw, G. B. Gott, D. R. Mabey, Howard McCarthy, and Uteana Oda. (Copper)

# **Reports Dealing With Strategic and Other Materials Issued by the Bureau of Mines**

**July-December 1962**

## **Reports of Investigations**

- 5856 Hafnium Content of Domestic and Foreign Zirconium Minerals.
- 5990 Chemical and Galvanic Corrosion Properties of High-Purity Vanadium.
- 6003 Metallurgical Testing of Hawaiian Ferruginous Bauxites.
- 6006 Field Test for Tellurium and Selenium.
- 6010 Pyrometallurgical Beneficiation of Offgrade Chromite and Production of Ferrochromium.
- 6014 Composition and Mechanical Properties of Selected Cold-Mold and Skull-Cast Titanium Alloys.
- 6018 Lead-Silver Deposits in the Omilak Area, Seward Peninsula, Alaska.
- 6029 Pyrolysis of Five Salts of Yttrium, Lanthanum, and Cerium. (Rare-earth).
- 6030 Problems in Substituting Titanium for Manganese in Steel.
- 6031 Defluorination of Fluorspar: Preparation of Aluminum Fluoride From Siliceous Fluorspar.
- 6032 Defluorination of Fluorspar: Pyrohydrolysis at 1,500° C.
- 6033 High-Temperature Heat Contents and Entropies of Sesquioxides of Europium, Gadolinium, Neodymium, Samarium, and Yttrium. (Rare-earth).
- 6034 Heats and Free Energies of Formation of Germanium Dioxide.
- 6037 Studies of Anhydrous Methods for Extracting Beryllium From Low-Grade Ores.
- 6038 Recovery of Zinc From Ammoniacal-Ammonium Sulfate Leach Solutions.
- 6040 Low-Temperature Heat Capacities and Entropies at 298. 15° K. of Antimony and Indium Sulfides.
- 6043 Recovery of Mineral Values in Cupriferous and Nickeliferous Pyrrhotite.
- 6044 Use of Various Salts as Copper-Volatilizing Agents in the Segregation Process.
- 6046 Differential Sulfatization of a Georgia Manganiferous Iron Ore.
- 6049 Heats and Free Energies of Formation of Calcium and Magnesium Vanadates.
- 6050 Oxygen Analysis of Mixed Fluoride Salts.
- 6055 Metallurgical Studies of Rhodonite Ores, Silverton District, Colorado (in three parts). 1. Beneficiation Tests to Produce Manganese Concentrates.
- 6062 Metallurgical Studies of Rhodonite Ores, Silverton District, Colorado (in three parts). 2. Producing Silicomanganese by Electric Furnace Smelting.
- 6064 Reconnaissance of Scandium Sources and Recovery of Scandium from Uranium Mill Solutions. (Rare-earth).
- 6069 Resources Investigation and Leaching Study of Manganiferous Schists, Kings Mountain District, North and South Carolina.
- 6071 Properties of Palygorskite, an Asbestiform Mineral.
- 6073 Effects of Ultrasonics on Electrolytic Deposition of Manganese and Manganese Dioxide From Sulfate Electrolysis.
- 6075 Electrowinning Molten Lanthanum From Lanthanum Oxide.
- 6078 Studies of Magnesium Alloys for Use at Moderate Temperatures.
- 6079 Titanium-Iridium Phase Diagrams.
- 6080 Preparation of Columbium and Tantalum by Metallic Reduction of Their Chlorides.
- 6084 Beryllium-Bearing Tuff From Spor Mountain, Utah: Its Chemical, Mineralogical, and Physical Properties.
- 6092 Alkyl-Dithiocarbamic Acid Amine Salts as Flotation Collectors for Sulfide Lead Slime.
- 6097 Ion Exchange Separation and Instrumental Analysis of Impurities in Rare-Earth Metals.
- 6100 The Desilication of Caustic Leach Liquors Containing Alumina.
- 6102 Bacterial Leaching of Manganese Ores.
- 6103 Flotation and Sintering Studies on Manganese Ores Stockpiled at Deming, N. Mex., and Wenden, Ariz.



#### Reports of Investigation—Continued

- 6107 Recovery of Tin, Tungsten, and Other Metals From Tin Smelter Wastes.
- 6108 Spectrochemical Analysis of High-Purity Beryllium.
- 6113 Deoxidation of Blister Copper by Gaseous Reduction.
- 6116 Vibration Damping Capacity of Various Magnesium Alloys.
- 6118 Sampling of Lynch Creek Beryllium-Tungsten Prospect, Lander County, Nev.
- 6120 Electric Furnace Smelting of Offgrade Domestic Manganese Ores and Concentrates.
- 6121 Extraction of Manganese From Low-Grade Dolomitic Materials by a Roast-Leach Process.
- 6131 Hydrogen as a Retaining Ion for Rare-Earth Separation by Ion Exchange With EDTA and DCTA.

#### Information Circulars

- 8082 Rare-Earth Compounds as High-Temperature Refractories: A Bibliography.
- 8083 Lead. A Materials Survey.
- 8103 Cobalt. A Materials Survey.
- 8107 Platinum Expansion Values for Thermal Calibration of High-Temperature X-Ray Diffraction Cameras and Diffractometers.
- 8110 Uses and Properties of Magnesia as a Superrefractory for Temperatures Above 1,500<sup>0</sup> C: A Bibliography.
- 8116 Economic Analysis of the Production of Ferronickel and Steel From Philippine Nickeliferous Ores.
- 8131 Mercury Occurrences in Alaska.
- 8138 Review of Major Proposed Processes for Recovering Manganese From United States Resources (in three parts). 1. Pyrometallurgical Processes

#### Bulletins

- 600 The Chemistry and Catalytic Properties of Cobalt and Iron Carbonyls.

# STATUS OF OBLIGATIONAL OPERATIONS

Under PL 117 and PL 520 for The National Stockpile

AS OF DECEMBER 31, 1962

AUTHORITY	APPROPRIATED FUNDS <sup>a/</sup>	AUTHORIZATIONS FOR		TOTAL OBLIGATIONAL AUTHORITY (CUMULATIVE) <sup>d/</sup>
		MAKING ADVANCE CONTRACTS <sup>b/</sup>	LIQUIDATING OUTSTANDING ADVANCE CONTRACTS <sup>c/</sup>	
<u>Under PL 117 - 76th Congress</u>				
PL 361 - 76th Congress, August 9, 1939	\$ 10,000,000	\$	\$	\$ 10,000,000
PL 442 - 76th Congress, March 25, 1940	12,500,000			22,500,000
PL 667 - 76th Congress, June 26, 1940	47,500,000			70,000,000 <sup>e/</sup>
<u>Under PL 520 - 79th Congress</u>				
PL 663 - 79th Congress, August 8, 1946	100,000,000	-	-	100,000,000
PL 771 - 80th Congress, July 30, 1947	100,000,000	75,000,000	-	275,000,000
PL 785 - 80th Congress, June 25, 1948	225,000,000	300,000,000	-	800,000,000
PL 785 - 80th Congress, June 25, 1948	75,000,000	-	75,000,000	800,000,000
PL 119 - 81st Congress, June 23, 1949	40,000,000	270,000,000	-	1,110,000,000
PL 130 - 81st Congress, June 30, 1949	275,000,000	250,000,000	-	1,635,000,000
PL 150 - 81st Congress, June 30, 1949	250,000,000	-	-	1,635,000,000
PL 434 - 81st Congress, October 29, 1949	-	-	250,000,000	1,635,000,000
PL 759 - 81st Congress, September 6, 1950	365,000,000	-	-	1,535,000,000
PL 759 - 81st Congress, September 6, 1950	240,000,000	125,000,000	-	1,660,000,000
PL 843 - 81st Congress, September 27, 1950	573,232,449 <sup>f/</sup>	-	-	2,025,000,000
PL 911 - 81st Congress, January 6, 1951	1,834,911,000	-	-	2,598,232,449
PL 253 - 82nd Congress, November 1, 1951	590,216,500	-	-	4,233,143,449
PL 253 - 82nd Congress, November 1, 1951	200,000,000	-	-	5,023,359,949
PL 455 - 82nd Congress, July 25, 1952	203,979,000	-	200,000,000	5,023,359,949
PL 176 - 83rd Congress, July 31, 1953	-	-	70,000,000	5,157,338,949
PL 428 - 83rd Congress, June 24, 1954	-	-	30,000,000	5,127,338,949
PL 663 - 83rd Congress, August 26, 1954	379,952,000 <sup>g/</sup>	-	27,600,000	5,099,738,949
PL 112 - 84th Congress, June 30, 1955	321,721,000 <sup>h/</sup>	-	-	5,479,680,949
PL 112 - 84th Congress, June 30, 1955	27,400,000	-	-	5,601,411,949
PL 846 - 85th Congress, August 28, 1958	3,000,000	-	27,400,000	5,601,411,949
Reincorporated by PL 255 - 86th Congress, September 14, 1959	-58,370,923 <sup>i/</sup>	-	-	5,543,041,026
PL 626 - 86th Congress, July 12, 1960	22,237,000 <sup>j/</sup>	-	-	5,565,278,026
PL 141 - 87th Congress, August 17, 1961	16,682,510 <sup>k/</sup>	-	-	5,581,960,536
PL 741 - 87th Congress, October 3, 1962	9,462,260 <sup>l/</sup>	-	-	5,591,422,796
Total PL 520	5,752,422,796 <sup>m/</sup>	\$1,020,000,000	\$1,400,000,000	\$7,864,422,796
Total PL 117 and 520	\$5,864,422,796 <sup>n/</sup>			\$7,864,422,796

<sup>a/</sup> Congressional appropriations of funds for stockpiling purposes.  
<sup>b/</sup> Congressional appropriations of contracting authority for stockpiling purposes in advance of appropriation of funds.  
<sup>c/</sup> Congressional authorization to liquidate outstanding obligations incurred under previously granted advance contract authority.  
<sup>d/</sup> Cumulative total of appropriated funds and advance contract authority, less authorization to liquidate outstanding advance contracts.  
<sup>e/</sup> Excludes \$4,864,782 retained for the stockpile materials for wartime consumption. Receipts were returned to Treasury, February 1944.  
<sup>f/</sup> Excludes \$25,404,921 authorized authority to make contracts.  
<sup>g/</sup> Excludes \$48,000 transferred to Transportation and Public Utilities Service, GSA.  
<sup>h/</sup> Excludes \$430,000 transferred to Transportation and Public Utilities Service, GSA and \$199,349,000 transferred to General Fund Receipts on June 27, 1956 - PL 623 - 84th Congress.  
<sup>i/</sup> As of June 30, 1959 this amount included cash of \$52,350,792 and receivables of \$8,020,131.  
<sup>j/</sup> Excludes \$7,763,000 transferred to other GSA funds for classified and wage board salary increases during 1961.  
<sup>k/</sup> Appropriation of \$40,000,000 of which \$22,700 transferred to Office of Administration, GSA and \$17,300,300 transferred to General Fund Receipts.  
<sup>l/</sup> Appropriation of \$19,000,000 less transfers to General Fund Receipts of \$8,537,740.  
<sup>m/</sup> Excludes receipts from vocational sales.

SOURCE:  
GENERAL SERVICES ADMINISTRATION

# TOTAL OBLIGATIONS AND EXPENDITURES OF STOCKPILING FUNDS

Under PL 117 and PL 520 for the NATIONAL STOCKPILE

CUMULATIVE AND BY FISCAL PERIOD THROUGH DECEMBER 31, 1962

Fiscal Period	OBLIGATIONS INCURRED		EXPENDITURES	
	Net Change By Fiscal Period	A/ Cumulative As of End of Period	By Fiscal Period	B/ Cumulative As of End of Period
Prior to Fiscal Year 1948	\$ 123,871,685	\$ 123,871,685	\$ 66,330,731	\$ 66,330,731
Fiscal Year 1948	252,901,411	376,773,096	82,907,575	149,238,306
Fiscal Year 1949	459,766,881	836,539,977	304,486,177	453,724,483
Fiscal Year 1950	680,427,821	1,516,967,798	440,834,970	894,559,453
Fiscal Year 1951	2,075,317,099	3,592,284,897	655,537,199	1,550,096,652
Fiscal Year 1952	948,117,547	4,540,402,444	844,683,459	2,394,780,111
Fiscal Year 1953	252,375,163	4,792,777,607	906,158,850	3,300,938,961
Fiscal Year 1954	116,386,681	4,909,364,288	644,760,321	3,945,699,282
Fiscal Year 1955	321,799,833	5,231,164,121	801,310,094	4,747,009,376
Fiscal Year 1956 C/	251,692,667	5,482,856,788	382,011,786 C/	5,129,021,162 C/
Fiscal Year 1957	190,000,109	5,672,856,897	354,576,558	5,483,597,720
Fiscal Year 1958	54,473,250	5,727,330,147	173,753,997	5,657,351,717
Fiscal Year 1959	38,710,879	5,766,041,026	65,260,098	5,722,611,815
Fiscal Year 1960	19,859,290	5,785,900,316	49,227,142	5,771,838,957
Fiscal Year 1961	29,062,919	5,814,963,235	33,325,431	5,805,164,388
Fiscal Year 1962	31,179,407	5,846,162,642	33,695,431	5,838,859,819
Fiscal Year 1963 - First Half	8,104,648	5,854,267,290	13,376,076	5,852,235,893

A/ Figures are the sum of obligations incurred under PL 520, 79th Congress and PL 117, 76th Congress.  
Final obligations under PL 117, 76th Congress were incurred in Fiscal Year 1949.

B/ Figures are the sum of expenditures under PL 520, 79th Congress and PL 117, 76th Congress.  
Final expenditures under PL 117, 76th Congress were made in Fiscal Year 1951.

C/ 1956 and subsequent fiscal periods and cumulative expenditures are reported on an accrual basis.

SOURCE: GENERAL SERVICES ADMINISTRATION

# EXPENDITURES OF STOCKPILE FUNDS, BY TYPE

(for the National Stockpile)

Cumulative and for First Half Fiscal Year 1963

Type of Expenditure	Cumulative Through June 30, 1962	Six Months Ended December 31, 1962	Cumulative Through December 31, 1962
Expenditures			
Gross Total	\$6,380,877,790	\$13,640,556	\$6,394,518,346
Less: Adjustment for Receipts from Rotation Sales and Reimbursements	542,017,971	264,480	542,282,451
Net Total	5,838,859,819	13,376,076	5,852,235,895
Material Acquisition Costs, Total	5,434,586,057	996,412	5,435,582,469
Stockpile Maintenance Costs, Total	352,591,855	10,447,595	363,039,450
Facility Construction	43,772,457	0	43,772,457
Storage and Handling Costs	210,114,983	6,461,377	216,576,360
Net Rotation Costs	98,704,415	3,986,218	102,690,633
Administrative Costs	46,640,450	1,178,675	47,819,125
Operations, Machine Tool Program	5,041,457	753,394	5,794,851

a/ Cumulative figures are the total of expenditures under PL 117, 76th Congress and PL 520, 79th Congress. Expenditures under PL 117 totaled \$70,000,000 of which \$55,625,237 was for materials acquisition costs and \$14,374,763 was for other costs. Final expenditures under PL 117 were made in FY 1951.

SOURCE: GENERAL SERVICES ADMINISTRATION





## APPENDIX A



# DISPOSING OF EXCESS STOCKPILE MATERIALS

JANUARY 16, 1963

REPORT TO THE PRESIDENT  
BY THE  
EXECUTIVE STOCKPILE COMMITTEE



EXECUTIVE OFFICE OF THE PRESIDENT  
OFFICE OF EMERGENCY PLANNING  
WASHINGTON 25, D.C.

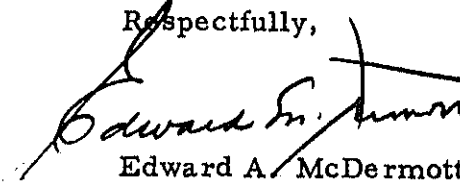
OFFICE OF THE DIRECTOR

January 16, 1963

Dear Mr. President:

As Chairman of the Executive Stockpile Committee,  
I am submitting herewith the Committee's report on  
Disposing of Excess Stockpile Materials for your  
review and consideration.

Respectfully,



Edward A. McDermott

Enclosure

The President  
The White House





# Report on Disposing of Excess Stockpile Materials

## Submitted to the President by the Executive Stockpile Committee

This report is in response to your request for the development of recommendations regarding long-range disposal programs for excess stockpile materials.

### SCOPE OF DISPOSAL PROBLEM

As of September 30, 1962, the market value of Government inventories of strategic and critical materials in excess of present maximum objectives was \$3,336,303,000.

Of this total, \$3,100,702,000 represented inventories of specification-grade materials. The balance, \$235,601,000, represented materials which do not meet specifications or for which there are no stockpile objectives.

About seventy-nine percent of the excess of specification-grade materials, i.e., \$2,438,000,000, is invested in inventories of only twelve materials. The remaining twenty-one percent of such excess, i.e., \$662,702,000, is contained in inventories of forty-nine materials.

Net recurring storage costs applicable to surplus inventories amount to approximately \$4 million annually.

### SOME ISSUES INVOLVED

The Committee concluded that long-range stockpile disposal programs can best be developed after decisions are reached about several important matters.

The issues involved are:

- (1) The need for a stockpile public information program.
- (2) The propriety of developing disposal plans for surplus materials before new and up-to-date stockpile objectives are calculated.
- (3) The need for retaining materials to meet some non-war requirements for strategic materials, e.g., cold war potential needs.
- (4) The preference to be given various methods of disposal.
- (5) The adoption and proclamation of criteria and procedures for developing disposal plans.
- (6) The need for additional legislation to promote efficient stockpile management and facilitate disposals of surplus material.

### RECOMMENDATIONS

As a result of its studies and discussions of these issues, the Committee makes the following recommendations:

- No. 1. A program should be developed to provide appropriate information to the general public, producers, processors, and consumers, both domestic and foreign, about the facts relative to stockpile surpluses, and the plans and programs which the Government may have or develop regarding them.
- No. 2. The Committee reaffirms the recommendation in its report of March 19, 1962, that present maximum objectives should be used to determine the surplus of each material for which disposal plans should be developed. A careful review of present objectives should be undertaken and different interim objectives adopted where appropriate.
- No. 3. In formulating disposal plans, disposals of stockpile surpluses should be deferred in those instances where this may be considered necessary to meet contingencies short of war or national emergency arising because of the unanticipated consequences of economic or political activities in foreign countries which might result in a cut-off of critical supplies essential to day-to-day operations of the economy. Deferral of disposals on this basis should be confined to those cases where the United States is dependent for the bulk of its requirements on a limited number of foreign countries, where adequate substitute materials are unavailable, and where a cut-off of supplies would cause a serious disruption in a broad sector of commercial or industrial activity.
- No. 4. Preference should be given to disposal of surpluses by direct cash sales through regular commercial channels.
- No. 5. No legislation should be requested to provide price differentials to small businesses purchasing surpluses. Attention should be given, however, to the use of

set-asides and the provision of terms and conditions which can be met by small businesses with regard to packaging, quantities, payments, and delivery. Full use should be made of the certification of competence procedure provided by section 8(b) (7) of the Small Business Act of 1958.

- No. 6. Surplus disposals should be on a non-exclusive, nondiscriminatory basis to all potential buyers, except where special circumstances might justify limiting disposals to a particular group, e.g., producers or sales agents.
- No. 7. Federal agencies should continue to purchase their direct needs for surplus stockpile materials from the General Services Administration.
- No. 8. Opportunities for disposals of surpluses through their use in the manufacture of articles being procured by the Government, i.e., indirect Government use, should be thoroughly investigated. This method of disposal should be used only when it is expected that disposals cannot otherwise be made. It should, however, be looked upon as an important tool for the implementation of surplus disposals.
- No. 9. Disposals which involve the use of surpluses to pay for all or part of the cost of Government procurement, i.e., barter, should be made only when it is expected that the disposal could not be satisfactorily made by other methods, and only when there are assurances that the materials will not be directly resold on the market. Such disposals, however, should be looked upon as an important tool for the implementation of surplus disposals.
- No. 10. Permanent authority for the use of Defense Production Act inventories to pay for the cost of upgrading materials needed for the National Stockpile should be provided by law.
- No. 11. Regardless of which of the methods discussed in recommendations Nos. 4 through 10 is used, the amount disposed of should be within the overall amount authorized by an approved long-term disposal program for the material involved.
- No. 12. (a) An interdepartmental committee chaired by the Office of Emergency Planning should be designated to conduct preliminary investigations of all aspects of the proposed disposal of any material, including selective consultation with industry. This committee should recommend relevant factors, policy decisions, and criteria for determining the ultimate maximum and minimum amounts of dis-

posal and the average rate of disposal to be incorporated in each long-range disposal program to be approved by OEP.

(b) Criteria for the development of disposal programs (Attachment A) should be approved and published.

- No. 13. Necessary stockpile legislation should be provided to expedite and facilitate the disposal of stockpile surpluses.
- No. 14. Disposal programs should be developed for all surpluses under the Defense Production Act and the Strategic and Critical Materials Stock Piling Act. Disposal programs for surpluses in the Supplemental Stockpile should also be developed if and when legislation is provided to facilitate disposals from that stockpile.

## DISCUSSION OF RECOMMENDATIONS

### No. 1. Public Relations Aspects

A program should be developed to provide appropriate information to the general public, producers, processors, and consumers, both domestic and foreign, about the facts relative to stockpile surpluses, and the plans and programs which the Government may have or develop regarding them.

The Committee recognizes that the disposal of the quantity of surplus materials now on hand, even if extended over a period of several years, could have adverse effects on domestic and world markets and the economies of various nations.

Further, the mere existence of these surpluses and the knowledge that the Government would like to dispose of them creates uneasiness in areas that would be affected by sales of the materials. The Committee believes that unfounded fears and speculation can be minimized through the effective dissemination of information about stockpile surpluses and the plans and programs which the Government may have or may develop with regard to them.

### No. 2. Determination of Surpluses

The Committee reaffirms the recommendation in its report of March 19, 1962, that present maximum objectives should be used to determine the surplus of each material for which disposal plans should be developed. A careful review of present objectives should be undertaken and different interim objectives adopted where appropriate.

Present stockpile objectives are keyed primarily to conventional war assumptions. Although the estimates on which they are based are, in some cases, several years old we have been assured that they are within safe limits of actual current needs required to meet such a conflict.

With respect to mobilization requirements for a nuclear attack emergency and the postattack period of recovery and reconstruction, the Committee has been advised that in most instances there will be no increased requirements for the types of materials that are now stockpiled. At present, allowance is made in stockpile objectives for this type of emergency through section 3 of Defense Mobilization Order V-7 which provides:

"Until such time as the essential needs of the nation in the event of a nuclear attack (including reconstruction) can be determined, the maximum objective shall not be less than six months' usage by industry in the United States in periods of active demand."

It is also recognized that there are numerous safety factors already built into present stockpile objectives which, because they are based on outdated strategic concepts, have resulted in the retention of amounts well beyond, in many cases, those that would be required to meet any contemplated emergency. There may, however, be some cases where additional precautions might be necessary to provide fully for the national security requirement for a few stockpile materials.

The Office of Emergency Planning has initiated a program for the development of new stockpile objectives to meet the requirements of both a conventional and a nuclear type war. It is most important that the new objectives be based on thorough studies which can be substantiated. It is far more important that they be carefully developed than that they be quickly produced.

In the meantime, disposal plans can be developed for surplus stockpile materials without incurring any real risk that new stockpile objectives will reflect increased requirements for which new purchases would have to be made.

### No. 3. Providing for Non-War Security Requirements

In formulating disposal plans, disposals of stockpile surpluses should be deferred in those instances where this may be considered necessary to meet contingencies short of war or national emergency arising because of the unanticipated consequences of economic or political activities in foreign countries which might result in a cut-off of critical supplies essential to day-to-day operations of the economy. Deferral of disposals on this basis should be confined to those cases where the United States is dependent for the bulk of its requirements on a limited number of foreign countries, where adequate substitute materials are unavailable, and where a cut-off of supplies would cause a serious disruption in a broad sector of commercial or industrial activity.

The economy of the United States is generally dependent on foreign sources of supplies for its

day-to-day requirement for many of the materials held in stockpile surpluses. We normally produce all of our requirements for only three of the more than seventy materials in stockpile inventories. In the case of one-third of these materials, we are completely dependent on foreign sources.

It was therefore decided that the security of the country required having on hand quantities of various materials which would be available for non-war emergency purposes. They would assure an essential supply that would give the country time to make necessary readjustments if we should be denied access to foreign sources in times short of mobilization or war.

The Committee believed that in determining the amount of surplus that might be approved for disposal, from time to time, it would be appropriate to place less urgency on the need for disposing of that part of the surplus required to meet non-war requirements of the national security. Where such requirements constitute a portion of a surplus which could be readily sold, no disposal plan should be authorized for such portion until the Congress has acted on stockpile legislation.

### Methods of Disposal

The Committee recognized that unless disposals are made when there is a shortage of the materials involved, sales may displace regular commercial sales which would have been made through current production by regular commercial sources. The impact of sales depends on the rates at which both the industry concerned and the national economy are operating. Hence, the timing of disposals is important.

An important obligation of the Government is to assure that sales of surplus materials do not cause an undue disruption of ordinary commercial markets of producers, processors, and consumers. It also has the responsibility for evaluating which of the various available methods of disposal would be the most appropriate in each set of circumstances, from the standpoint of the welfare of both the Government and the general public.

The Committee discussed in detail the following methods of disposing of surpluses:

- (a) Direct sales through commercial channels.
- (b) Direct Government use.
- (c) Indirect Government use.
- (d) Barter transactions using surpluses in lieu of cash.
- (1) Surpluses used to pay for procurement.
- (2) Surpluses used as payment-in-kind for services involved in upgrading Government-owned inventories.

### No. 4. Direct Sales Through Commercial Channels

Preference should be given to disposal of surpluses by direct cash sales through regular commercial channels.

Direct cash sales through normal commercial channels constitute the primary method by which most stockpile disposals have been made. A long-range sizable disposal program should depend heavily upon such sales.

#### No. 5. Problems of Small and Independent Businesses

No legislation should be requested to provide price differentials to small businesses purchasing surpluses. Attention should be given, however, to the use of set-asides and the provision of terms and conditions which can be met by small businesses with regard to packaging, quantities, payments, and delivery. Full use should be made of the certification of competence procedure provided by section 8(b) (7) of the Small Business Act of 1958.

It has been suggested, at least indirectly, that sale of surplus strategic and critical materials should be made to small and independent businesses at prices below those at which such materials are sold to other purchasers.

In one instance, it was stated in justification of such discounted prices that raw material producers made sales to their own subsidiaries at prices well below those at which they priced sales on the open market.

The Committee concluded that no direct price differentials between small businesses and large enterprises--or between integrated and non-integrated producers--should be established as a part of the disposal program. It was also advised that there was no law on which to base price differentials to small and independent businesses.

One of the devices for assuring small business access to Government surplus materials is to provide for a set-aside of certain quantities or percentages of the materials which will be sold to small consumers. The need to provide for such small business set-asides in connection with a sizable, long-range disposal program may be greater than the past limited disposal experiences would indicate.

#### No. 6. Disposal To or Through Producers

Surplus disposals should be on a non-exclusive, nondiscriminatory basis to all potential buyers, except where special circumstances might justify limiting disposals to a particular group, e.g., producers or sales agents.

It has been suggested that if the amount of material to be sold is so large that it could disrupt the normal schedule of production and distribution, arrangements should be made to negotiate a sale to or through producers of the material involved.

For example, the American Mining Congress, in 1961, included in a declaration of policy dealing with a number of matters affecting the mining industry, the suggestion that disposal plans should

provide for sale only through domestic producer-marketing channels. The New York Hard Fiber Association has proposed that disposals of excess cordage be limited to sales to members of the Association who would resell it, through their regular channels, to rope and twine manufacturers. Specific suggestions of this kind have been made by three of the major integrated aluminum producers--the Aluminum Company of America, the Reynolds Metal Company, and the Kaiser Aluminum & Chemical Corporation. An analogous proposal has been made by the International Nickel Company, with respect to the disposal of nickel.

The Committee believes that as a general rule it is best for the Government to offer its stockpile surpluses for sale on a non-exclusive non-discriminatory basis to all potential buyers. There may be cases, however, where an exception to this general rule may be justified. In our view the Government should be willing to weigh representations made to it that there are special circumstances justifying an exception in a particular case.

In any case where disposals are made through one or more of the major producers, the greatest care should be taken to see that such disposals are not at variance with other Government policies, particularly those related to antitrust matters.

#### No. 7. Disposals Through Direct Government Use

Federal agencies should continue to purchase their direct needs for surplus stockpile materials from the General Services Administration.

Another method for disposing of stockpile surpluses is the use of excess materials by the Government directly in its own activities. Section 16 of Defense Mobilization Order V-7, provides that:

"Government agencies which directly use strategic and critical materials shall fulfill their requirements through the use of materials in Government inventories that are excess to the needs thereof whenever such action is found to be consistent with overall disposal policies and with the best interests of the Government."

The term "direct Government use" generally means actual consumption of the material in a Government-owned and operated facility or establishment such as a Navy Yard, an ordnance plant, laboratory, or the U.S. Mint.

There are few opportunities for disposing of surpluses through direct Government use because the Government does not consume substantial amounts of raw materials as such. Also, it is frequently found that the Government requirement is for a special grade, size, or shape not available in surplus stocks, or that the quantity involved is insignificant. GSA determines as a matter of judgment whether the necessary conversion work, or small-lot shipment, is in the interest of the Government.

Examples of "direct Government use" are: copper and nickel to the U.S. Mint for coinage; lead to the Navy Department for ballast; and magnesium to the Atomic Energy Commission for uranium reduction purposes. Copper, nickel, and lead have also been used in small amounts by several military installations.

#### No. 8. Disposals Through Indirect Government Use

Opportunities for disposals of surpluses through their use in the manufacture of articles being procured by the Government, i.e., indirect Government use, should be thoroughly investigated. This method of disposal should be used only when it is expected that disposals cannot otherwise be made. It should, however, be looked upon as an important tool for the implementation of surplus disposals.

Disposals of excess stockpile materials by indirect Government use involve the use of surpluses by private prime, sub-, and sub-subcontractors in the production of items being procured by Government departments and agencies. Such use might range from instances where the stockpile material is the sole or primary raw material used in manufacturing the end item being procured, to instances where the material is a minor factor in the end product.

Examples of the former are the use of feathers and down in DOD and VA purchases of sleeping bags and medical pillows, and the use of copper or aluminum in DOD, TVA, or AID financed purchases of wire, rod, and similar products.

Examples of the latter are the use of copper in the manufacture of motors or generators bought by DOD, and the use of nickel in stainless steel sinks in a large Government housing project.

There are many possibilities for making disposals through indirect Government use. Theoretically, they are as numerous as the available materials in the stockpile, the extensive Government procurement program, and an imaginative and aggressive disposal program would support.

As the process is carried to the second and third tier of contractors and even beyond, it becomes increasingly complicated. It places extra administrative burdens on the procurement officers and the private contractors.

There are alternative ways of approaching this matter. None of them is simple or thoroughly proven. The excess materials might, for example, be sold to DOD and made available as Government-furnished material (GFM), by that Department to its contractors. Although this may be possible so far as furnishing material to the prime contractor for his use is concerned, it is administratively infeasible for DOD and other procuring agencies to channel the raw material as GFM down through the tiers of subcontractors.

A suggested way of meeting the second and third tier problems is to require the prime contractor

to use surplus materials in the production of items being procured and to provide in his contract with his subcontractors that they, too, meet their material needs by purchasing stockpile surpluses. This provision could be carried through the subcontracting chain to the mills. There is no serious question about the ability of the Government to enforce the provision with a prime contractor.

There should be no serious problem in enforcing such provisions if the Government and the prime contractor are determined to make the acceptance of such provisions a firm condition of getting the contract or subcontracts.

Although the difficulties involved in indirect Government use of surplus materials may place additional burdens on both the procuring agencies and the contractors, this device may in some cases justify the effort.

It is recognized that the indirect use of surpluses through Government procurement could provide an important outlet for the disposal of such materials. While this is not a preferred method for disposal, it can, in the proper circumstances, be used to the advantage of the Government.

The Office of Emergency Planning and GSA should explore this method of disposal in cooperation with DOD and other Federal agencies.

#### No. 9. Use of Surpluses as Barter Medium in Government Procurement

Disposals which involve the use of surpluses to pay for all or part of the cost of Government procurement, i.e., barter, should be made only when it is expected that the disposal could not be satisfactorily made by other methods, and only when there are assurances that the materials will not be directly resold on the market. Such disposals, however, should be looked upon as an important tool for the implementation of surplus disposals.

The barter process is another important method of disposing of surpluses. Barter should be distinguished from indirect Government use. In the latter, the amount of surplus disposed of is the amount used in the production of the item being procured or an amount taken in exchange for the material used in the production. Barter, on the other hand, involves the use of surpluses to pay for all or part of the purchase price which includes the manufacturer's raw material, labor, and overhead costs and profit.

Opportunities for barter are often accompanied by indirect use of materials by the Government in connection with its procurement program.

It might, for example, be possible to reimburse a manufacturer of light bulbs for the materials used in the bulbs as well as the cost of manufacture and other costs by giving him tungsten concentrates in dollar amounts which would equal the

total purchase price of the bulbs. This would be a combination of indirect Government use and barter.

Theoretically, opportunities for using excess inventories as a medium of exchange in the acquisition of manufactured products by the U.S. Government are as extensive as the Government's procurement program. Practically, there are significant limitations on the extent to which this device is usable. Our economy is geared to a free flow of goods and services with money as the medium of exchange. Many difficulties arise when the pattern is altered by adding another step, i.e., surpluses which may have to be converted to money.

Experience has shown that barter can best be carried out in disposing of excess material when the quantities of a material in any instance are relatively large and the number of manufacturers involved is small. It becomes unduly complicated when the process involves many small lots and negotiations with many companies.

#### No. 10. Barter Used as Payment-in-Kind for Stockpile Upgrading Programs

Permanent authority for the use of Defense Production Act inventories to pay for the cost of upgrading materials needed for the National Stockpile should be provided by law.

The stockpiling of advanced forms of materials is part of present stockpiling policy. It represents stockpiling of time, labor, power, facilities, and transportation, in addition to the materials. The use of excess material to pay for upgrading materials in the stockpile, i.e., payment-in-kind, enables the United States Government to improve the quality of the stockpile, save cash, and simultaneously reduce surpluses.

Most of the processing costs of upgrading materials already in the National Stockpile were financed by cash payment. During the past few years, some processing costs have been financed by the use of surplus materials in the DPA inventory.

Copper, nickel, aluminum, and tungsten concentrates have been used as payment-in-kind for the upgrading of several items. The materials used for payment were not always the same as the materials which were upgraded. Copper was used to pay for the upgrading of molybdenum ore to molybdic oxide; nickel was used to pay for the upgrading of manganese ore to electrolytic manganese metal; aluminum was used for payment of upgrading vanadium ore to ferro-vanadium; and tungsten concentrate was used to pay for upgrading of columbium ore to columbium carbide powder, and tantalum ore to tantalum carbide powder.

The Independent Offices Appropriation Bill, 1963, (H.R. 12711), as passed by the House of Representatives, eliminated a provision in the 1962 Appropriation Act which permitted GSA to use surplus materials in the DPA inventory for pay-

ment of expenses of upgrading materials in the National Stockpile. The provision was restored by the Senate, finally accepted by the Conference Committee, and enacted for another fiscal year in the Independent Offices Appropriation Act of 1963.

The Committee feels that this important authorization should not depend upon annual renewal. It is therefore recommended that legislation should provide permanent authority to use surplus materials to pay for such costs.

#### No. 11. General Recommendation on Methods of Disposal

Regardless of which of the methods discussed in recommendations Nos. 4 through 10 is used, the amount disposed of should be within the overall amount authorized by an approved long-term disposal program for the material involved.

#### No. 12 (a) and (b). Development of Disposal Programs

(a) An interdepartmental committee chaired by the Office of Emergency Planning should be designated to conduct preliminary investigations of all aspects of the proposed disposal of any material, including selective consultation with industry. This committee should recommend relevant factors, policy decisions, and criteria for determining the ultimate maximum and minimum amounts of disposal and the average rate of disposal to be incorporated in each long-range disposal program to be approved by OEP.

(b) Criteria for the development of disposal programs (Attachment A) should be approved and published.

The disposal of substantial quantities of a material, and especially a large-scale program involving the disposal of significant amounts of many materials in a short period of time can have an adverse effect upon domestic and foreign producers, processors, and consumers of those materials, upon economic and employment conditions, and upon the international interests of the United States.

The development of long-range disposal programs is a delicate and complicated process involving the collection and analysis of a mass of information derived from many sources in industry and government, both domestic and foreign. The process requires the exercise of judgment in the application of officially approved and publicized criteria to the particular facts in each case. There is involved not only a seeking of advice and guidance from industry, the public, and foreign governments and producers, but a publicizing of the problems faced by the Government.

In contrast with the job ahead, it may be said that in the past there have been relatively modest disposals of stockpile surpluses. In most cases

the procedures have been informal. They included, generally, interdepartmental consultation and concurrences in the development of disposal plans prepared by GSA. Consultation with industry or foreign governments has been left to the discretion of the delegate agency concerned.

Recent experience indicates that the disposal of larger quantities of surplus materials can produce many problems which have not heretofore developed. It has become more and more apparent that there is need for greater coordination within government to insure effective consultation with industry. It is also recognized that there is need for developing a greater understanding on the part of the general public of the problems faced by the Government in the case of stockpile surpluses.

The Committee is persuaded of the need for adopting a set of criteria or principles which will be applied on a case-by-case basis in the development of disposal programs. These criteria should be published so that there will be no unfounded fears or speculations about the Government's approach to these problems, and so that the various segments of the economy that might be affected by the disposal program will have assurances on which they can depend and base their plans. The Government should solicit and evaluate comments on the proposed criteria.

The Committee therefore recommends the immediate designation of an interdepartmental committee under the chairmanship of OEP to develop on a commodity basis broad guidelines to be followed in developing a disposal program. It should recommend the scope of the program, including the amount of the surplus to be sold and the period over which and the rate at which it should be sold. In its study, the committee should consult on an informal basis with industry and with various experts and specialists in Government. Consultations should be flexible and on a case-by-case ad hoc basis with no needless formalities. They would be exploratory in nature and on a selective basis for the purpose of seeking information and opinions of qualified experts from industry and elsewhere at a formative stage. As a part of its recommendation, it should establish the procedure for subsequent consultation with industry and government in the actual development of the detailed disposal plan. The committee would indicate which of the published criteria should be applied in the case of each disposal plan and to what extent.

If OEP approves the findings of the committee as to the basic determinations, criteria, and policy that should be incorporated in any disposal plan, it will simultaneously:

- (1) Request GSA to develop, in consultation with Federal Departments and agencies as required by DMO V-7, a disposal plan which will incorporate the approved findings; and

- (2) Issue a press release describing its request to GSA and inviting the submission of comments by all interested parties. The press release should designate a specific Department to receive such comments depending on the material involved in the disposal.

As a guide in designating Departments or agencies to receive such comments or to conduct consultations with industry or foreign countries, the Committee suggests:

- a. The Department of State--affected friendly foreign governments or interests;
- b. The Department of the Interior--metals and minerals producers;
- c. The Department of Commerce--industrial fabricators and consumers; and
- d. The Department of Agriculture--producers of food and fiber.

The agreement of June 21, 1962 (published in the Federal Register of September 18, 1962) between the Secretary of the Interior and the Secretary of Commerce regarding their preparedness and mobilization responsibilities with respect to minerals can serve as an additional guide in this matter.

It will be the responsibility of the recipient department to communicate its evaluation of the comments received and consultations held to GSA's interdepartmental group for appropriate consideration in the development of the disposal plan. A representative of OEP should participate in the meetings of this group.

OEP may, on its own motion or on the basis of the recommendations of the designated committee, request that public hearings be held before a disposal plan is developed. Such determination may be made at any time prior to the adoption of a plan.

Such hearing would be open to all interested parties including representatives of interested companies or foreign countries who could appear and present written and/or oral statements to be considered in the development of the final disposal plan. A panel of representatives of interested Government agencies designated by the Director of OEP could conduct the hearing under the chairmanship of a member of the panel also designated by the Director of OEP.

All disposal plans approved by the Director of OEP should be published in the Federal Register as provided by law.

#### No. 13. Legislation

Necessary stockpile legislation should be provided to expedite and facilitate the disposal of stockpile surpluses.

The Committee considered in great detail the legislation needed to accomplish the objectives of this recommendation.



*The Defense Production Act* should be amended for the following reasons:

- (1) At present it is not possible to enter into long-term contracts involving the disposal of surpluses, because the authority to contract under the Act is limited to the period ending June 30, 1965 (Section 303(b)). The Congress failed to grant the Administration's request for an amendment of this authority during the last session.
- (2) Sales of surplus metals and minerals held under the Act may not be made at less than "the current domestic market price."

In the case of many materials, producers offer materials for delivery in foreign markets at prices lower than they offer the same materials for delivery in this country. Because of the limitation on the price at which sales can be made, the Government is precluded from making sales of surplus materials for deliveries in foreign markets because they cannot meet the prevailing prices for delivery in such markets.

The Congress failed to grant the Administration's request for an amendment of this price limitation (Section 303(a)) during its last session.

- (3) At present, the authority to use surplus materials held under the Act to upgrade materials in the National Stockpile and to meet defense requirements is dependent on the language in the Appropriation Act and, consequently, expires at the end of the fiscal year. Although the Congress has enacted such legislation for the past several years as a part of the appropriation process, the Committee is of the opinion that such authority should be provided as permanent legislation. The Congress failed to grant the Administration's request for such authority during its last session.

*The Strategic and Critical Materials Stock Piling Act* should be amended for the following reason:

- (1) As a general rule, surplus materials in the National Stockpile may only be sold six months after the publication of a plan of disposal in the Federal Register and the giving of notice to the Congress, and, in most cases, with the express approval of the Congress of such disposal. The Committee felt that the development of well-ordered and carefully thought-out long-range disposal programs would justify reducing the waiting period from six months to sixty days and eliminating the requirement

for express approval of the Congress. Disposals would be made by executive branch determination sixty days after notice to the Congress and publication of a notice in the Federal Register. The present safeguard with regard to protecting the United States against avoidable loss and the avoidance of disruption of usual markets of producers, processors, and consumers would be retained.

*The Agricultural Trade Development and Assistance Act of 1954*, as amended, which established the Supplemental Stockpile should be amended to permit the following:

- (1) Materials in the Supplemental Stockpile should be available for transfer to or exchange for materials in the National Stockpile when required to meet stockpile objectives or where exchange would improve the quality of the National Stockpile inventory.
- (2) Materials in the Supplemental Stockpile not required for national defense should be made available for sale on the new terms and conditions which are being requested in regard to the National Stockpile surpluses.

*In general, greater flexibility should be provided to transfer and interchange materials among the stockpiles.* Such flexibility could result in the more effective use of materials for national security purposes. The disposal of excess materials could be greatly facilitated and the efficiency with which the stockpiles are managed could be substantially improved if materials in the three different inventories (National Stockpile, DPA inventory, and Supplemental Stockpile) could be more easily transferred or interchanged from one inventory to another. Such transfers should be permitted without reimbursement to the inventory from which the material is transferred.

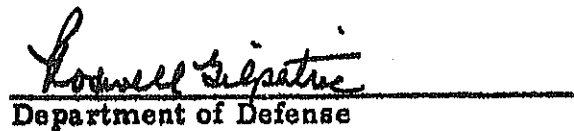
## CONCLUSION

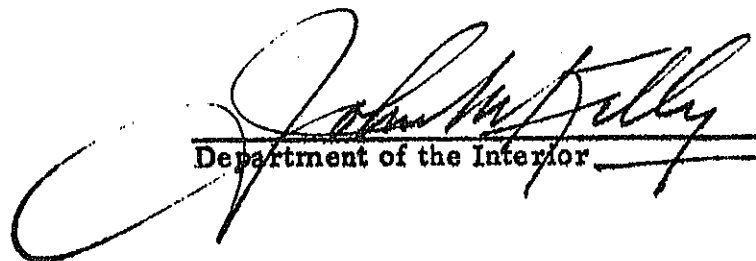
The Committee recommends that upon the completion of the President's review and conclusions on the foregoing recommendations, the Office of Emergency Planning undertake the development of individual long-range disposal programs for each surplus stockpile material presently held under the Defense Production Act of 1950, as amended, and the Strategic and Critical Materials Stock Piling Act. If and when legislation to facilitate disposals from the Supplemental Stockpile is enacted, disposal programs for surpluses in such stockpile should also be developed.

Respectfully submitted,

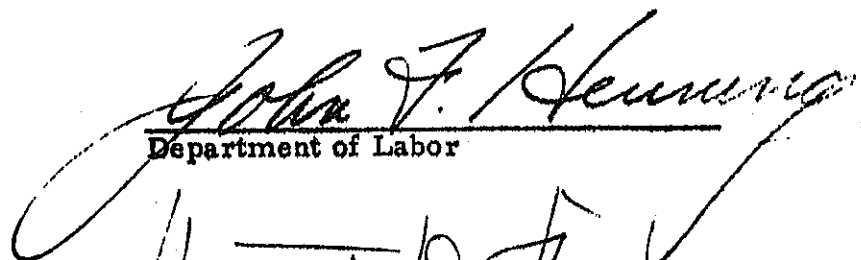
  
Chairman

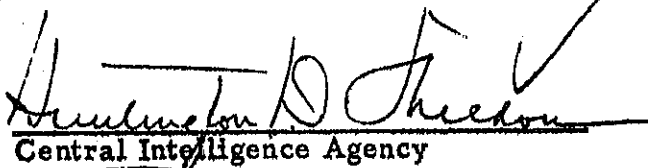
  
Department of State

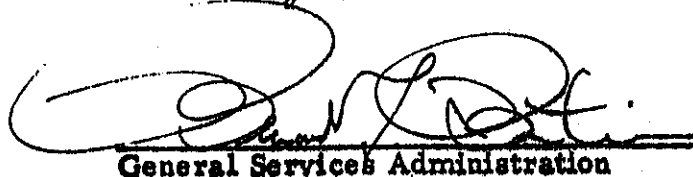
  
Department of Defense

  
Department of the Interior

  
Department of Commerce

  
Department of Labor

  
Central Intelligence Agency

  
General Services Administration

## CRITERIA FOR DEVELOPMENT OF DISPOSAL PROGRAM

The goal of long-term disposal is the sale of surplus materials from U.S. stockpiles in amounts which can be absorbed by regular marketing channels without avoidable loss to the Government and without creating hardships in the domestic or friendly foreign economies. Therefore, broad-scale disposal plans should be established on an individual commodity basis, in amounts and over periods of time which will not unduly interfere with production and employment.

To this end, the appropriate interagency committee under the chairmanship of the Director, Office of Emergency Planning, without excluding other relevant matters, shall consider the following criteria and associated factors:

1. Disposals should be made in a manner aimed at minimizing market disruption. The disposal rate should relate to: the size of the market that must absorb the commodity; the trend in the market; the relation of production to consumption; export-import balance; known commercial commodity inventories; and marketing habits peculiar to the commodity.
2. Disposals should take account of the geographic concentration of the sources of supply and areas

of consumption; corporate concentration and diversification; the effect on investment of capital in exploration and development of new supplies; number of people employed in the industry; the extent to which sales may contribute to unemployment; the existence of a labor dispute; industrial peculiarities of the commodity and the relation of the affected industry to the general economy.

3. Disposals should take into account trends towards technological obsolescence or new and expanded applications.
4. All disposal programs should be fully coordinated with other Government programs and objectives. They should be consistent with programs designed to protect and assist portions of domestic industry, with barter arrangements and with foreign policy objectives and programs.

To the extent practicable, the above factors should be reduced to quantitative criteria, including minimum and maximum rates of disposal applicable to a given commodity, with can be used by Government officials and known by industry.





